

THE INDUSTRY (CONTINUED)

The Comet's Manifolds

THE provision of a corrosion-resisting material for exhaust manifolds has always been a problem, and it is interesting to hear that Iconel, the special alloy made for such purposes by Henry Wiggin and Co., Ltd., of Thames House, Millbank, London, S.W.1, was used in the record-breaking D.H. Comet.

Essex Aero, Ltd., have told the makers in a letter: "The Iconel which you supplied to us . . . has been very successful. We have been unable to trace a fault in either of these manifolds, in spite of the extremely high duty which they have been called upon to give."

Useful Wire Mesh

A CATALOGUE recently issued gives details of "Prana" woven wire mesh covering for pressure containers, tubing, hose and cable, etc. It is produced by Sparklets, Ltd., who, it is stated, have forty years' experience in the manufacture of such material, notably in the production of coverings for the famous "Sparklet" syphon. Extreme flexibility, resistance to high internal pressures, and good non-corrosive qualities are among the advantages claimed. Flat woven strip for electrical conductors is also produced.

Sparklets, Ltd., who have a factory at Edmonton, London, are a subsidiary of the British Oxygen Co., Ltd., and their offices are at Thames House, Millbank, London, S.W.1.

Resistance Welding

RESISTANCE welding is finding increasingly wide application, particularly for sheet-metal work as found in the aircraft and automobile industries.

A paper on the subject, recently presented by Dr. F. R. Hensel to the Institute of Welding, offers much useful information for those interested in the process. Reprints (containing many illustrations) may be obtained from the firm to which Dr. Hensel is consulting metallurgist—Mallory Metallurgical Products, Ltd., Waddon Factory Estate, Croydon, Surrey.

One of the problems of resistance welding is that of ensuring a sufficiently long working life for the highly stressed electrode materials. The Mallory series of hard, high-conductivity alloys last, it is claimed, from three to twenty times longer than copper, while their resistance to "mushrooming" ensures uniform electrode pressure and current density.

PUBLICATIONS RECEIVED

- Notes on Supercharging for Ground Engineers*, by C. E. Jones; 2s., Sir Isaac Pitman & Sons Ltd.
- Report on Civil Aviation in Australia and New Guinea, 1936-1937*. The Civil Aviation Board, Department of Defence, Melbourne, Australia.
- The Chosen Instrument*, by Norman Macmillan, 6s., John Lane, The Bodley Head, Ltd.
- Aeroplane Design*, by E. W. C. Wilkins, 20s., Charles Griffin and Co., Ltd., 42, Drury Lane, London, W.C.2.
- Banners Yellow*, by J. E. Gurdon, 7s. 6d., George Newnes, Ltd.
- Doomed Flight*, by J. Raiton Holden, 7s. 6d., George Newnes, Ltd.
- How to Become an Air Pilot*, by Capt. R. L. Preston, 5th edition, 8s. 6d., Sampson Low, Marston and Co.
- Aircraft Radio*, by D. Hay Surgeoner, 12s. 6d., Sir Isaac Pitman and Sons.
- Machine Drawing for Students*, by F. J. Pryer, 3rd edition, 7s. 6d., Sir Isaac Pitman and Sons.
- Gesammelte Vorträge der Hauptversammlung 1937 der Lilienthal-Gesellschaft für Luftfahrtforschung*; E. S. Mittler and Sohn, Berlin.
- Report on the Health of the Royal Air Force for the Year 1936*; 2s., H.M. Stationery Office.
- Handbook of Aeronautics. Vol. 2: Aero-Engines, Design and Practice*, by Andrew Swan; 25s., Sir Isaac Pitman and Sons.
- Journal of the Royal Air Force College, Spring, 1938*. Cranwell, Lincs.
- National Advisory Committee for Aeronautics: Report No. 601: Torsion Tests of Tubes*, by A. H. Stang, W. Ramberg and G. Back, 10 cents. No. 602: *Wind-Tunnel and Flight Tests of Slop-Lip Ailerons*, by J. A. Shortall, 15 cents. No. 604: *Pressure Distribution Measurements at Large Angles of Pitch on Fins of Different Span-Chord Ratio on a 1/40-Scale Model of the U.S. Airship "Akron"*, by J. G. McHugh, 10 cents. No. 605: *Résumé and Analysis of N.A.C.A. Lateral Control Research*, by F. E. Weick and R. T. Jones, 15 cents.
- No. 606: *Electrical Thermometers for Aircraft*, by J. B. Peterson and S. H. J. Womack, 10 cents. No. 607: *Spinning Characteristics of the XN2Y-1 Airplane Obtained from the Spinning Balance and Compared with Results from the Spinning Tunnel and from Flight Tests*, by M. J. Bamber and R. O. House, 10 cents. No. 608: *Stress Analysis of Beams with Shear Deformation of the Flanges*, by P. Kuhn, 10 cents. No. 610: *Tests of Related Forward-Camber Airfoils in the Variable-Density Wind Tunnel*, by E. N. Jacobs, R. M. Pinkerton and H. Greenberg, 15 cents. No. 611: *Wind-Tunnel Investigation of Tapered Wings with Ordinary Ailerons and Partial-Span Split Flaps*, by C. J. Wenzinger, 10 cents. All from Superintendent of Documents, Washington, D.C., U.S.A.
- The Royal Air Force Quarterly*, January, 1938; 5s., Gale and Polden, Ltd., Wellington Works, Aldershot.
- "603," 1937. No. 603 County of Edinburgh (Bomber) Squadron.
- Air Publication 29: Royal Air Force Flying Training Manual, Part 1—Landplanes*; 6s., H.M. Stationery Office, Kingsway, London, W.C.2.

The British Journal Photographic Almanac, 1938; 2s., Henry Greenwood and Co., Ltd., 24, Wellington Street, Strand, London, W.C.2.

The Blue Book: The Electrical Trades Directory and Handbook, 1938; 25s., Benn Bros., Ltd., Bouverie House, Fleet Street, London, E.C.4.

Report on the Progress of Civil Aviation in India, 1936-37; 1s. 6d., Manager of Publications, Delhi, India.

"Elektron" Magnesium Alloys; 10s. 6d., F. A. Hughes and Co., Ltd., Abbey House, Baker Street, London, N.W.1.

Heft 26: Flugfunkwesen, Teil I. Physikalische Grundlagen der Funktechnik, Karl Möbius, C. J. E. Volckmann Nachf. E. Wette, Berlin-Charlottenburg 2, Germany.

International Index to Aeronautical Technical Reports, 1937; 6s., Sir Isaac Pitman and Sons, Ltd.

NEW COMPANIES

In the notes below, for reasons of space, the "objects" of new companies are usually somewhat abbreviated.

AERO ENGINEERING PLANNING AND EQUIPMENT CO., LTD.—Private company, registered March 2. Capital, £100 in 100 shares of £1 each. Objects: To carry on business as ironfounders, steel makers, engineers, manufacturers of and dealers in aircraft, etc. The directors are: John Roper and William Jones. Registered Office: Curtis House, Poplar Road, Solihull, Warwickshire.

GRIEVE AND GRAY, LTD.—Private company, registered March 12. Capital, £1,600 in 1,600 ordinary shares of £1 each. Objects: to acquire the business of Grieve and Gray carried on at 112a, High Street, Harlesden, N.W.10, and to carry on the business of woodworkers, manufacturers of and dealers in aeroplanes and other aircraft, etc. The directors are John V. Grieve and Leonard A. Gray.

AERIAL FILMS (SCOTLAND) LTD.—Private company, registered in Edinburgh March 16. Capital, £200 in £1 shares. Objects: to carry on the business of photography in all its branches, etc. The directors are James M. Lawson, 120, Novar Drive, Glasgow, W.2, and Robert G. Lawson.

CHANGE OF NAME

HAMPSHIRE AEROPLANE CLUB, LTD. (Southampton Airport, Southampton).—Name changed to Hampshire School of Flying, Ltd., on March 12, 1938.

INCREASES OF CAPITAL

DEEKAY AIRCRAFT CORPORATION, LTD., 61, Crutched Friars, London, E.C.2.—The nominal capital has been increased by the addition of £2,000 in £1 ordinary shares beyond the registered capital of £10,000.

NOTTINGHAM AIRPORT, LTD., Tollerton Aerodrome, Notts.—The nominal capital has been increased by the addition of £2,000 in £1 shares beyond the registered capital of £3,000.

NUFFIELD MECHANISATIONS AND AERO, LTD., Common Lane, Washwood Heath, Birmingham, 8.—The nominal capital has been increased by the addition of £100,000 in £1 ordinary shares beyond the registered capital of £10,000.

SAUNDERS SHIPYARD, LTD., Cornubia Shipyards, Clarence Road, East Cowes, I.O.W.—The nominal capital has been increased by the addition of £34,900 in £1 ordinary shares beyond the registered capital of £100. This increase is for the purpose of acquiring part of the undertaking of Saunders-Roe, Ltd.

DEEKAY AIRCRAFT CORPORATION LTD. (61, Crutched Friars, London E.C.2).—The nominal capital has been increased by the addition of £8,000 in £1 ordinary shares beyond the registered capital of £12,000.

F. J. HOLDINGS LTD., 18, Austin Friars, London, E.C.2.—The nominal capital has been increased by the addition of £900 in £1 ordinary shares beyond the registered capital of £100. This increase is for the purpose of acquiring (a) the entire issued share capital of The Gloster Aircraft Co. Ltd. and (b) not less than 90 per cent of the issued share capital of Hawker Aircraft Ltd.

MARTIN HEARN, LTD. (Aeronautical Engineers, etc., Merseyside Air Park, Hooton, Ches.).—The nominal capital has been increased by the addition of £1,500 beyond the registered capital of £500.

BLACKBURN AIRCRAFT, LTD. (Brough, E. Yorks.).—The nominal capital has been increased by the addition of £220,000 beyond the registered capital of £60,000.

HORDERN-RICHMOND AIRCRAFT, LTD. (28, Berkeley Street, London, W.1).—The nominal capital has been increased by the addition of £5,000 beyond the registered capital of £10,000.

NORTH-EASTERN AIRWAYS, LTD. (Airport of London, Croydon, Surrey).—The nominal capital has been increased by the addition of £50,000 in £1 ordinary shares beyond the registered capital of £50,000.

AERONAUTICAL PATENT SPECIFICATIONS

(Published March 31, 1938.)

17456. SPERRY GYROSCOPE CO., INC.: Automatic steering-gear for aircraft (480,778).
23361. DANIEL, P. G. L.: Wing or water wheels for use as prime movers, propellers, or as sustaining devices for aircraft (481,014).
25933. CESKA ZBRJOVKA AKCIOVA SPOLCENOST V PRAZE: Synchronising means for machine guns firing through the propeller circles of aircraft (481,033).
31190. SAULNIER, R.: Pumps for aircraft machinery (480,970).
34443. FAIRLEY AVIATION CO., LTD., and FORESTY, A. G.: Electric switches for controlling the extent of travel of electric motors (480,983).
5700. FAIRLEY AVIATION CO., LTD., and Voss, E.: Quick release pin (480,998).
7901. SHORT BROS. (ROCHESTER AND BEDFORD), LTD., and McVIE, R.: Means for folding monoplane wings (481,050).
9655. ETABLISSEMENTS VERBOOM ET DUBOUCHEARD: Devices for removing sea-places and other similar machines from the water (480,923).
10880. SHORT BROS. (ROCHESTER AND BEDFORD), LTD., and SHEPHERD, P.: Method of covering aircraft wings surfaces and bodies (481,059).
13893. PRAUZER, J.: Automatic machine-gun carriers adapted to be dropped from aircraft (481,066).
20931. SHEVLIN, J. T. (Siemens Apparate und Maschinen Ges): Instrument boards for aircraft (480,849).
- (Published April 7, 1938.)
22337. DOWTY, G. H.: Means for lifting, lowering or supporting aircraft (481,265).
24428. BINKS, C. L., and AMAL, LTD.: Fastening devices for aeroplane cowlings and like covers (481,361).
24823. REISSNER, H., and ARGUS MOTOREN Ges: Variable-pitch screw propeller for aircraft (481,519).
25042. DOWTY, G. H.: Retractable undercarriages for aircraft (481,440).
25528. LINK, J. W., E. A.: Apparatus for training aviators (481,375).
33382. CASPAR, F. A., and PAR PARACHUTE CO., LTD.: Method of folding parachutes (481,455).
15574. SARAZIN, R. R. R.: Torque indicator (481,240).
21141. BREKKE CORPORATIONS, INC.: Fuel tanks for airplanes (481,490).